

Product and Supplier Names

Maxxon® LDF
 Maxxon Corporation
 920 Hamel Road · PO Box 253
 Hamel, MN 55340
www.Maxxon.com/123EZ · info@maxxon.com
 800-238-8461

Yield

Thickness	Yield
1/2" (13 mm).....	36 ft ² (3.34 m ²)
1" (25 mm).....	18 ft ² (1.67 m ²)
2" (51 mm).....	9 ft ² (0.84 m ²)
4" (102 mm).....	4.5 ft ² (0.42 m ²)
6" (152 mm).....	2.25 ft ² (0.21 m ²)

Product Description/Use

LDF is a revolutionary, lightweight deep fill flooring product made from Portland cement and a proprietary, lightweight. The expanded foam aggregate produces an exceptionally lightweight cement, making it perfect for deep fill applications where total floor loads are a concern. LDF is a cement product designed to mixed on the job site and to be capped with a Maxxon Underlayment. LDF can be either pumped or poured.

FEATURES:

- Ultra lightweight; up to 80% lighter than concrete
- Foam beads coated to prevent water absorption
- Moisture tolerant
- Can be sloped
- No thickness limitation
- Pours over conduit, wires, pipes, etc.

Packaging

Product Number.....17000
 Package Type.....bag
 Package Size.....40 lb (18.14 kg) bag

Technical Data

28 Day Dry Density.....28-32 lb/ft³ (449-513 kg/m³)
 Compressive Strength.....200-500 psi (1.38-3.45 MPa) (ASTM C109)
 Flexural Strength.....119 psi (ASTM C78)
 Mod of Elasticity.....1.1 GPa (ASTM C649)
 Freeze/Thaw.....no loss @ 300 cycles (ASTM C666)
 R-Value.....1.8 per inch
 Working Time.....10-30 minutes
 Final Set.....8-12 hours

Installation

LDF WITH A MAXXON UNDERLAYMENT TOPPING IS A TWO-DAY APPLICATION PROCEDURE.

TOOLS NEEDED: Mixing Drum (15 gallon), 1 gallon measuring tool, high-speed mixing drill (850 rpm), Jiffy (preferred) or egg-beater mixing paddle, gauge rake, smoother/spreader, nonmetallic cleated shoes

PREP: All subfloors must be structurally sound, broom cleaned and contaminant free. All subfloors must be dry and a minimum of 50 °F (10 °C). Temperatures must be maintained within this range for at least 72 hours (up to the total specified dry time) after the installation of LDF.

After properly preparing the substrate Maxxon strongly recommends Anhydrous Calcium Chloride: testing as per ASTM F 1869-16 on slabs to be treated, to determine the MVER (moisture vapor emission rate) per ASTM standards. Alternately determine RH content (%) as per ASTM F 2170. Note: MVER fluctuates within slab areas and can have significant seasonal variations (i.e. in Nov./Dec. 6 lbs and in July/August 16 lbs or more). When using LDF as an underlayment with other finished floor systems (such as resilient, VCT and ceramic), always follow manufacturer's recommendations regarding maximum allowable MVER and RH content prior to installation. In cases where MVER and RH exceed allowable levels, Maxxon recommends installation of a suitable moisture-reduction barrier, i.e. Aquafin's VAPORTIGHT COAT® -SG2, SG3, or SG4. Once the barrier is cured, apply a Maxxon approved primer before the application of LDF.

PRIMING: Prime all substrates with a Maxxon approved primer, such as Maxxon Fortify Primer or Maxxon Multi-Use Acrylic. Refer to relevant technical datasheet for proper application instructions and follow instructions for appropriate substrate.

MIXING: Mix 2.3-2.6 gal of water per 40 lb bag of LDF. Do not over water.

Combine LDF beaded powder and water using a high-speed mixer (850 rpm) with a "Jiffy" mixing paddle.

TIP: The lightweight beads can scatter with fast mixing before the cement is completely wetted. To minimize mess, start with a moderated mixing speed and cover the barrel top with the empty cement bag.

INSTALL:

Depending on deep fill criteria, either set eyelets on finishing rake to desired thickness, set grade pins, or pull string lines to desired thickness.

Pour LDF from mixing bucket onto primed subfloor. Immediately after placing LDF, spread material using a suitable gauge rake to assist in achieving the desired depth. Apply material to appropriate depth and follow with a suitable smoother.

DAY 2 – TOPPING LDF WITH MAXXON UNDERLAYMENTS

LDF is typically ready for foot traffic and Maxxon Underlayment topping in 6-12 hours (next day). Prime the LDF with Maxxon Multi-Use Acrylic or Maxxon Fortify Primer following instructions found on appropriate TDS. Install Maxxon Underlayment (either gypsum and cement-based), at a minimum of 3/4" (19 mm) following install instructions found on TDS.

Drying

LDF is typically ready for foot traffic and a Maxxon Underlayment 6-12 hours (next day). Follow dry times for capping underlayment before floor goods installation.

Storage and Disposal

Store in original sealed packaging in a cool, dry environment. Protect from humidity and water. Storage temperatures 50-122 °F (10-50 °C).

Dispose of contents/container in accordance with applicable regulations.

Warranty, Availability and Technical Services

See our website for complete warranty information. Technical performance verification and service is available through Maxxon Corporation or Maxxon Regional Representative throughout North America.

Limitations

1. For interior use only, Maxxon Underlayments should not be

used for exterior applications, or where it will come into prolonged contact with water.

2. Maxxon Underlayments may be scheduled before or after installation of drywall.
3. The typical minimum depth of a Maxxon Underlayment is 3" (76 mm). For depths greater than 3" (76 mm), contact an authorized applicator.
4. The structural floor should be adequate to withstand design loads with deflection limitations of L/360. The structural subfloor and floor joist must both comply with manufacturers' maximum span criteria. Typically, a deflection limitation of L/360 is adequate for Maxxon Underlayments. Some floor coverings may require a stiffer floor system. Maxxon Underlayments are non-structural and therefore cannot be expected to reinforce structurally deficient subfloors. Necessary allowances should be made for expected live, concentrated, impact, and/or dead loads including the weight of finished floor goods and setting beds.
5. Additional considerations should be taken for concentrated/dynamic loads. U.S. building codes typically specify a uniform live load of 40 pounds per square foot for residential floor designs. This load is intended to account for large loads that can occur in a building. In reality these loads are not uniform, but rather consist of items such as furniture and appliances that actually induce concentrated loads far exceeding 40 lbs/ft². Rolling concentrated loads such as office chairs, wheelchairs, and motorized scooters add turning, twisting, repetition, and other dynamics which should also be taken into consideration. Determining the appropriate structural design of the floor is not the responsibility of Maxxon nor the Maxxon applicator.
6. All materials above crawl spaces must be protected by a vapor barrier.
7. Maxxon Underlayments should not be directly applied to plastic vapor barriers, over particleboard, chipboard, hardboard such as Masonite®, Luan panels, metal, asbestos, or any other non-dimensionally stable materials.
8. Maxxon Underlayments are not designed to be installed on or below grade, except over well-drained structural substrates.
9. In cases where moisture vapor emission is an issue, always mitigate the substrate prior to application of Maxxon Underlayments with VAPORTIGHT COAT-SG2, SG3 or SG4. Never install a moisture barrier product over a Maxxon Underlayment.
10. Do not use in areas where extended or repetitive exposure to moisture is anticipated.
11. Turn off radiant heating systems 24 hours prior to and after installation.
12. NEVER BRIDGE EXPANSION AND CONTROL JOINTS, always ensure such joints are honored completely through Maxxon Underlayments and primer. Existing expansion joints may be

carried through the Maxxon Underlayment pour by using industry standard products such as backer rod or cork. In cases where control or expansion joints are not present in the substrate, use design professional recommendations to provide for them in the system.

13. Avoid walking on installed surface for at least 4 hours after installation. Depending on temperature and humidity conditions.
14. Not suitable as a substrate for epoxy coatings.
15. Maxxon Underlayments are not designed as a finished permanent wear surface but may be exposed to rolling dynamic loads (i.e. fork/scissor lifts during construction) after minimum 72 hours following installation at 1/4" (6 mm). During construction, place temporary wood planking over the underlayment wherever it will be subjected to heavy wheeled or concentrated loads.

Note: Proper application is the responsibility of the user. Field visits by Maxxon personnel are for the purpose of making technical recommendations and not for supervising or providing quality control on-site.